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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,283	05/04/2001	Tae Hoon Lee	K-281	7689
34610	7590	11/06/2003	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			BERCK, KENNETH A	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n No.

09/848,283

Applicant(s)

TAE HOON LEE

Examiner

Ken A Berck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Amendment B, filed 7/7/2003, has been entered.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ragland, Jr. (5644192).

Ragland discloses (fig 9-10) a tension mask assembly with a tension mask (24') having electron beam through holes, at least one sub-frame (72), main frames (70) welded to the tension mask, bent at a middle portion in a width direction and has a portion perpendicular to the tension mask defining a partition and another portion opposite to the tension mask defining a lower plane, and the widths of a middle portion and of both ends of the lower plane are formed in the range of  $0 < (w1-w2)/w2 \leq 1.0$ .

Regarding claim 2, Ragland discloses (fig 9-10) a tension mask assembly with a tension mask (24') having electron beam through holes, at least one sub-frame (72), main frames (70) welded to the tension mask, bent at a middle portion in a width direction and has a portion perpendicular to the tension mask defining a partition and another portion opposite to the tension mask defining a lower plane, a support (56) bent from the lower plane, and the widths of a middle portion and of both ends of the lower plane are formed in the range of  $0 < (y1-y2)/y2 \leq 1.0$ .

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Regarding claim 3, Ragland discloses (fig 9-10) the widths of a middle portion and of both ends of the support are formed in the range of  $0 < (d1-d2)/d2 \leq 1.0$ .

Regarding claim 4, Ragland discloses the electron beam through holes are shaped as a slot or grill (figs 3-4).

Regarding claim 5, Ragland discloses the main frames are welded to the at least one subframe (column 3, lines 15-28).

Regarding claim 6, Ragland discloses the shape of the lower plane is one of curved.

Regarding claim 7, Ragland discloses a cathode ray tube containing the tension mask assembly.

Regarding claim 8, Ragland discloses the electron beam through holes are shaped as a slot or grill (figs 3-4).

Regarding claim 9, Ragland discloses the main frames are welded to the at least one subframe (column 3, lines 15-28).

Regarding claim 10, Ragland discloses the shape of the lower plane is one of curved.

Regarding claim 11, Ragland discloses a cathode ray tube containing the tension mask assembly.

Regarding claim 12, Ragland discloses a tension mask assembly with holes disposed therein, at least one sub-frame, main frames attached to the tension mask including a first portion extending perpendicular and a second portion perpendicular to the first defining a lower plane and the width of a middle portion of the lower plane is

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greater than a width of edge portions, the width of the edge portions being greater than zero.

Regarding claim 13, Ragland discloses the shape of the lower plane is one of curved.

Regarding claim 14, Ragland discloses the main frames are welded to the at least one subframe (column 3, lines 15-28).

Regarding claim 15, Ragland discloses a third portion bent from the lower plane, the main frame having a triangular cross section.

Regarding claim 16, Ragland discloses the width of the middle portion is greater than the width of the edge portion.

Regarding claim 17, Ragland discloses a cathode ray tube containing the tension mask assembly.

Regarding claim 18, Ragland discloses (fig 9-10) the widths of a middle portion and of both ends of the second portion are formed in the range of  $0 < (w_1 - w_2) / w_2 \leq a$  prescribed value.

Regarding claim 19, Ragland discloses a prescribed value equals 1.

Regarding claim 21, Ragland discloses (fig 9-10) the widths of a middle portion and of both ends of the third portion are formed in the range of  $0 < (d_1 - d_2) / d_2 \leq a$  prescribed value.

Regarding claim 21, Ragland discloses a prescribed value equals 1.

Regarding claim 22, Ragland discloses the lower plane is attached to the at least one subframe (column 3, lines 15-28).

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Regarding claim 23, Ragland discloses at least one subframe is attached to a bottom surface of the lower plane of the main frame (fig 6).

***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.


**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

  
kab

  
VIP PATEL  
PRIMARY EXAMINER